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**Docket No.:** 5000-0133PUS1

## JC17 Rec'd PCT/PTO 20 SEP 2005

## AMENDMENTS TO THE CLAIMS

1. (Original) A 2-substituted pyrimidine of the formula I

$$\mathbb{R}^{3}$$
  $\mathbb{N}$   $\mathbb{R}^{2}$ 

in which the index and the substituents are as defined below:

- n is an integer from 1 to 5, where at least one substituent L is located in the orthoposition on the phenyl ring;
- L is halogen, cyano, nitro, cyanato (OCN),  $C_1$ - $C_8$ -alkyl,  $C_2$ - $C_{10}$ -alkenyl,  $C_2$ - $C_{10}$ -alkynyl,  $C_1$ - $C_6$ -alkoxy,  $C_2$ - $C_{10}$ -alkenyloxy,  $C_2$ - $C_{10}$ -alkynyloxy,  $C_3$ - $C_6$ -cycloalkyl,  $C_3$ - $C_6$ -cycloalkenyl,  $C_3$ - $C_6$ -cycloalkenyloxy,  $C_3$ - $C_6$ -cycloalkyl,  $C_3$ - $C_6$ -cycloalkenyloxy,  $C_3$ - $C_6$ -cycloa

m is 0, 1 or 2;

A, A', A'' independently of one another are hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkynyl, C<sub>3</sub>-C<sub>8</sub>-cycloalkyl, C<sub>3</sub>-C<sub>8</sub>-cycloalkenyl, phenyl,

where the organic radicals may be partially or fully halogenated or may be substituted by cyano or C<sub>1</sub>-C<sub>4</sub>-alkoxy; or A and A' together with the atoms to which they are attached are a five- or six-membered saturated, partially unsaturated or aromatic heterocycle which contains one to four heteroatoms from the group consisting of O, N and S;

- R<sup>1</sup> is C<sub>3</sub>-C<sub>10</sub>-alkyl, C<sub>3</sub>-C<sub>10</sub>-alkenyl, C<sub>3</sub>-C<sub>10</sub>-alkynyl, C<sub>3</sub>-C<sub>12</sub>-cycloalkyl, C<sub>3</sub>-C<sub>10</sub>-cycloalkyl or a five- to ten-membered saturated, partially unsaturated or aromatic heterocycle which is attached via carbon and contains one to four heteroatoms from the group consisting of O, N and S,
- $R^2$  is halogen, cyano,  $C_1$ - $C_4$ -alkyl,  $C_2$ - $C_4$ -alkenyl,  $C_2$ - $C_4$ -alkynyl,  $C_1$ - $C_4$ -alkoxy,  $C_3$ - $C_4$ -alkenyloxy or  $C_3$ - $C_4$ -alkynyloxy, where the alkyl, alkenyl and alkynyl radicals of  $R^2$  may be substituted by halogen, cyano, nitro,  $C_1$ - $C_2$ -alkoxy or  $C_1$ - $C_4$ -alkoxycarbonyl,

where the aliphatic, alicyclic or aromatic groups of the radical definitions of L,  $R^1$  and/or  $R^2$  for their part may be partially or fully halogenated or may carry one to four groups  $R^u$ :

R<sup>u</sup> is halogen, cyano,  $C_1$ - $C_8$ -alkyl,  $C_2$ - $C_{10}$ -alkenyl,  $C_2$ - $C_{10}$ -alkynyl,  $C_1$ - $C_6$ -alkoxy,  $C_2$ - $C_{10}$ -alkenyloxy,  $C_3$ - $C_6$ -cycloalkyl,  $C_3$ - $C_6$ -cycloalkenyl,  $C_3$ - $C_6$ -cycloalkoxy,  $C_3$ - $C_6$ -cycloalkenyloxy,  $C_3$ - $C_6$ -cycloalkenyloxy,  $C_9$ - $C_9$ 

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N(A')A, C(A')(=N-OA), N(A')A, N(A')-C(=O)-A, N(A'')-C(=O)-N(A')A,  $S(=O)_m-A$ ,  $S(=O)_m-O-A$  or  $S(=O)_m-N(A')A$ , where m, A, A', A'' are as defined above and where the aliphatic, alicyclic or aromatic groups for their part may be partially or fully halogenated or may carry one to three groups  $R^v$ ,  $R^v$  having the same meaning as  $R^u$ ;

- R³ is cyano,  $CO_2R^a$ ,  $C(=O)NR^zR^b$ ,  $C(=O)-N-OR^b$ ,  $C(=S)-NR^aR^b$ ,  $C(=NOR^a)NR^zR^b$ ,  $C(=NOR^a)NR^zR^b$ ,  $C(=NR^a)NR^zR^b$ ,  $C(=O)NR^a-NR^zR^b$ ,  $C(=N-NR^zR^c)NR^aR^b$ ,  $C(=O)R^a$ ,  $C(=NOR^b)R^a$ ,  $C(=N-NR^zR^b)R^a$ ,  $CR^aR^b-OR^z$ ,  $CR^aR^b-NR^zR^c$ ,  $C(=N-NR^zR^b)$ ,  $O-C(=O)R^a$ ,  $C(=O)R^a$ , C
  - R<sup>a</sup>,R<sup>b</sup>,R<sup>c</sup> independently of one another are hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>2</sub>-C<sub>6</sub>-alkynyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl or C<sub>4</sub>-C<sub>6</sub>-cycloalkenyl;
  - R<sup>b'</sup> has the same meanings as R<sup>b</sup>, except for hydrogen;
  - R<sup>2</sup> has the same meanings as R<sup>a</sup> and may additionally be -CO-R<sup>a</sup>;

where the aliphatic or alicyclic groups of the radical definitions of R<sup>a</sup>,R<sup>b</sup>,R<sup>c</sup> or R<sup>z</sup> for their part may be partially or fully halogenated or may carry one to four groups R<sup>w</sup>:

- R<sup>w</sup> is halogen, cyano, C<sub>1</sub>-C<sub>8</sub>-alkyl, C<sub>2</sub>-C<sub>10</sub>-alkenyl, C<sub>2</sub>-C<sub>10</sub>-alkynyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>2</sub>-C<sub>10</sub>-alkenyloxy, C<sub>2</sub>-C<sub>10</sub>-alkynyloxy, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkenyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkoxy, C<sub>3</sub>-C<sub>6</sub>-cycloalkenyloxy, and where two of the radicals R<sup>a</sup>, R<sup>b</sup>, R<sup>c</sup> or R<sup>z</sup> together with the atoms to which they are attached may form a five- or six-membered saturated, partially unsaturated or aromatic heterocycle which contains one to four heteroatoms from the group consisting of O, N and S.
- (Original) A 2-substituted pyrimidine according to claim 1 where R<sup>2</sup> is chlorine, cyano, methyl, ethyl or methoxy.
- 3. (Original) A 2-substituted pyrimidine according to claim 1 where  $R^3$  is cyano,  $C(=O)NR^zR^b$ ,  $C(=S)NR^zR^b$ ,  $C(=NOR^a)NR^zR^b$ ,  $C(=NOR^b)R^a$ ,  $C(=N-NR^zR^b)R^a$  or  $CR^aR^b-NR^zR^c$ .
- 4. (Original) A 2-substituted pyrimidine according to claim 1 where  $R^3$  is  $ON(=CR^aR^b)$ ,  $NR^a(C(=O)R^b)$ ,  $NR^a(C(=O)OR^b)$ ,  $NR^a(N=CR^cR^b)$  or  $NR^z-OR^a$ .

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(Currently Amended) A 2-substituted pyrimidine according to any of claims 1 to 4
 claim 1 in which the phenyl group substituted by L<sub>n</sub> is the group B

$$L^{5} \xrightarrow{L^{4}} L^{3}$$

$$+ L^{2}$$

$$B$$

where # is the point of attachment to the pyrimidine skeleton and

L<sup>1</sup> is fluorine, chlorine, CH<sub>3</sub> or CF<sub>3</sub>;

L<sup>2</sup>,L<sup>4</sup> independently of one another are hydrogen, CH<sub>3</sub> or fluorine;

L<sup>3</sup> is hydrogen, fluorine, chlorine, cyano, CH<sub>3</sub>, SCH<sub>3</sub>, OCH<sub>3</sub>, SO<sub>2</sub>CH<sub>3</sub>, NH-C(=O)CH<sub>3</sub>, N(CH<sub>3</sub>)-C(=O)CH<sub>3</sub> or COOCH<sub>3</sub> and

L<sup>5</sup> is hydrogen, fluorine, chlorine or CH<sub>3</sub>.

6. (Original) A process for preparing 2-substituted pyrimidines of the formula I according

$$\mathbb{R}^1$$
  $\mathbb{L}_n$   $\mathbb{R}^2$ 

to claim 1 where  $R^3$  is cyano, which comprises reacting a compound of the formula III, in which the substituents L,  $R^1$  and  $R^2$  are as defined in claim 1 and X is halogen,  $C_1$ - $C_6$ -alkylythio,  $C_1$ - $C_6$ -alkylythio,  $C_1$ - $C_6$ -alkylythio,  $C_1$ - $C_6$ -alkylythio,  $C_1$ - $C_6$ -alkylythio, if appropriate in the presence of a base.

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7. (Original) A composition suitable for controlling harmful fungi which comprises a solid or liquid carrier and a compound of the formula I according to claim 1.

- 8. (Original) A method for controlling phytopathogenic harmful fungi which comprises treating the fungi or the materials, plants, the soil or seeds to be protected against fungal attack with an effective amount of a compound of the formula I according to claim 1.
- 9. (New) A 2-substituted pyrimidine according to claim 2 in which the phenyl group substituted by  $L_n$  is the group B

$$L^{5}$$

$$L^{4}$$

$$L^{3}$$

$$L^{2}$$

$$B$$

where # is the point of attachment to the pyrimidine skeleton and

- L<sup>1</sup> is fluorine, chlorine, CH<sub>3</sub> or CF<sub>3</sub>;
- L<sup>2</sup>,L<sup>4</sup> independently of one another are hydrogen, CH<sub>3</sub> or fluorine;
- L<sup>3</sup> is hydrogen, fluorine, chlorine, cyano, CH<sub>3</sub>, SCH<sub>3</sub>, OCH<sub>3</sub>, SO<sub>2</sub>CH<sub>3</sub>, NH-C(=O)CH<sub>3</sub>, N(CH<sub>3</sub>)-C(=O)CH<sub>3</sub> or COOCH<sub>3</sub> and
- L<sup>5</sup> is hydrogen, fluorine, chlorine or CH<sub>3</sub>.

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10. (New) A 2-substituted pyrimidine according to claim 3 in which the phenyl group substituted by  $L_n$  is the group B

$$L^{5} \qquad L^{4} \qquad \qquad B$$

where # is the point of attachment to the pyrimidine skeleton and

L<sup>1</sup> is fluorine, chlorine, CH<sub>3</sub> or CF<sub>3</sub>;

L<sup>2</sup>,L<sup>4</sup> independently of one another are hydrogen, CH<sub>3</sub> or fluorine;

L<sup>3</sup> is hydrogen, fluorine, chlorine, cyano, CH<sub>3</sub>, SCH<sub>3</sub>, OCH<sub>3</sub>, SO<sub>2</sub>CH<sub>3</sub>, NH-C(=O)CH<sub>3</sub>, N(CH<sub>3</sub>)-C(=O)CH<sub>3</sub> or COOCH<sub>3</sub> and

L<sup>5</sup> is hydrogen, fluorine, chlorine or CH<sub>3</sub>.

11. (New) A 2-substituted pyrimidine according to claim 3 in which the phenyl group substituted by L<sub>n</sub> is the group B

$$L^{5} \xrightarrow{L^{4}} L^{3}$$

$$L^{2}$$

$$L^{5} \xrightarrow{L^{4}} L^{2}$$

where # is the point of attachment to the pyrimidine skeleton and

L<sup>1</sup> is fluorine, chlorine, CH<sub>3</sub> or CF<sub>3</sub>;

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L<sup>2</sup>,L<sup>4</sup> independently of one another are hydrogen, CH<sub>3</sub> or fluorine;

- L<sup>3</sup> is hydrogen, fluorine, chlorine, cyano, CH<sub>3</sub>, SCH<sub>3</sub>, OCH<sub>3</sub>, SO<sub>2</sub>CH<sub>3</sub>, NH-C(=O)CH<sub>3</sub>, N(CH<sub>3</sub>)-C(=O)CH<sub>3</sub> or COOCH<sub>3</sub> and
- L<sup>5</sup> is hydrogen, fluorine, chlorine or CH<sub>3</sub>.
- 12. (New) A 2-substituted pyrimidine according to claim 4 in which the phenyl group substituted by L<sub>n</sub> is the group B

$$L^{5}$$

$$L^{4}$$

$$L^{2}$$

$$B$$

where # is the point of attachment to the pyrimidine skeleton and

- L<sup>1</sup> is fluorine, chlorine, CH<sub>3</sub> or CF<sub>3</sub>;
- L<sup>2</sup>,L<sup>4</sup> independently of one another are hydrogen, CH<sub>3</sub> or fluorine;
- L<sup>3</sup> is hydrogen, fluorine, chlorine, cyano, CH<sub>3</sub>, SCH<sub>3</sub>, OCH<sub>3</sub>, SO<sub>2</sub>CH<sub>3</sub>, NH-C(=O)CH<sub>3</sub>, N(CH<sub>3</sub>)-C(=O)CH<sub>3</sub> or COOCH<sub>3</sub> and
- L<sup>5</sup> is hydrogen, fluorine, chlorine or CH<sub>3</sub>.